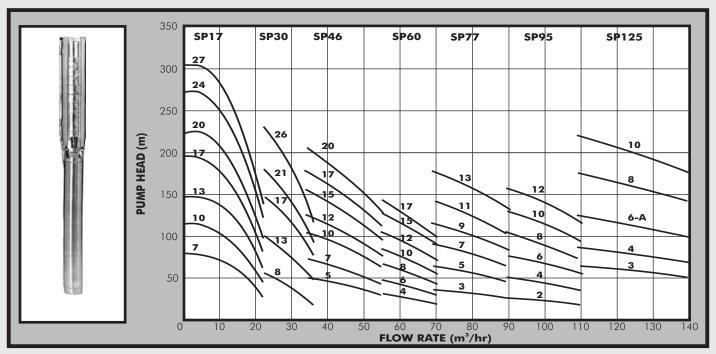




# Multistage Centrifugal Borehole Pumps



### **PUMP**

GRUNDFOS SP submersible pumps are designed specifically for borehole supply applications. They are of multistage centrifugal impeller design and all parts are made from stainless steel with water lubricated rubber bearings. A submersible motor is fitted beneath the pump and suction is effected through a strainer between the pump and motor.

Standard pumps are designed for the pumping of non-aggressive water. 'N and R' versions are available for applications requiring a higher degree of corrosion resistance.

All SP pumps carry a drinking water approval and meet European Minimum Efficiency Index guidelines.

### MOTOR

The pump is coupled to a sealed, liquid cooled 2-pole asynchronous GRUNDFOS motor constructed of stainless steel with ceramic bearings. All motors are also fitted with a built-in sensor which monitors running temperatures. When fitted with the patented GRUNDFOS MP 204 control unit protection is provided against dry running, mechanical motor defects, excessive motor running temperature and irregular power supply. The fitting of MP204 unit is recommended for motor control and monitoring and also extended motor life.

Note that irrespective of the fitting of MP 204 control unit a remote starter is required. Due to the low starting torques of submersible motors it is recommended that Direct-on-Line starters are used on motor sizes up to 22kW. Motors above this size should use a soft start arrangement.

Enclosure Class: IP58 Insulation Class: F Voltage: 3x415V Speed: 2900rpm

## **OPERATING CONDITIONS**

**Pumped Liquids:** Thin, clean, chemically non-aggressive liquids without solid particles or fibres.

Max. Liquid Temperature: +40°C

Min. Water Depth: 600 m

Min. Borehole Diameter: 110mm (4" motor), 152mm (6" motor), 254mm (8" motor)

## **PUMP DATA**

Model	Motor		Motor Diameter	Full Load Current (A)	I Start	DN (")	Dimensions (mm)				Weight (kgs)
	kW	НР	(")	Correin (A)			Α	В	С	E	] (kgs)
SP17-7	4	5.5	4	9.7	5.0	2½	1251	574	677	131	5.5
SP17-10	5.5	7.5		13.7	5.5		1631	773	858		7.5
SP17-13	7.5	10	6	17.6	4.9		1630	574	1056	142	10
SP17-17	9.2	12.5		20.2	4.8		1888	590	1298		12.5
SP17-20	11	15		24.8	4.7		2113	634	1479		15
SP17-24	13	17.5		29	4.6		2429	708	1721		17.5
SP17-27	15	20		34	5.0		2602	699	1903		20

Model	Motor		Motor Diameter	Full Load	<u>I Start</u>	DN (")	Dimensions (mm)				Weight
	kW	НР	(")	Current (A)	'		Α	В	С	E	(kgs)
SP30-8	7.5	10	6	18.8	4.5	3	1602	565	1037	142	53
SP30-13	11	15		24.8	4.7		2151	634	1517		72
SP30-17	15	20		34	5.0		2600	699	1907		85
SP30-21	18.5	25		42.2	5.1		3039	754	2285		98
SP30-26	22	30		48	5.0		3579	814	2765		112
SP46-5	7.5	10		17.6	4.5		1406	574	832	147	54
SP46-7	11	15		24.8	4.7		1698	634	1064		68
SP46-10	15	20		34	5.0		2102	699	1403		82
SP46-12	18.5	25		42	5.1		2383	754	1629		93
SP46-15	22	30		48	5.0		2782	814	1968		106
SP46-17	26	35		57	4.9		3068	874	2194		117
SP46-20	30	40		65	4.9		3477	944	2533		132
SP60-4	7.5	10	4	18.8	4.5	5	1482	773	709	152	44
SP60-6	11	15	]	24.8	4.7		1585	634	951		65
SP60-8	15	20	6	34	5.0		1876	699	1177		77
SP60-10	18.5	25		42	5.1		2157	754	4103		88
SP60-12	22	30		48	5.0		2443	814	1629		99
SP60-15	26	35		57	4.9		2842	874	1968		112
SP60-17	30	40		66.5	4.9		3138	944	2194		125
SP77-3	11	15		24.6	4.8		1557	683	874		75
SP77-5	18.5	25		41.5	4.8		1914	784	1131		95
SP77-7	26	35	8	57.5	5.2		2290	903	1387	200	114
SP77-9	30	40		65	5.3		2611	968	1643		129
SP77-11	37	40		80	4.3		3339	1425	1898		184
SP77-13	55	74		114	5.9		3522	1350	2172	209	259
SP95-2	9.2	12	<b>」</b>	20.2	4.9		1336	590	746	200	68
SP95-4	18.5	25	6	41.5	4.8		1786	783	1898		91
SP95-6	26	35		57.5	5.2		2162	903	1898		110
SP95-8	37	50		80	4.3		2940	1425	1898		173
SP95-10	45	60	8	96.5	6		3035	1270	1785		233
SP95-12	55	74	l	114	5.9		3393	1350	2043		255
SP125-3	30	40	6	63	4.9	6	1907	944	963	211	123
SP125-4	37	50		85	5.1		2431	1312	1119		171
SP125-6-A	55	73	8	112	5.9		2781	1350	1431	218	257
SP125-8	75	100		152	54		3333	1590	1743		314
SP125-10	92	123		186	5.6		3885	1830	2055		372

 $E^* = Maximum$  diameter of the pump inclusive of cable guard and motor

